CLAIM AMENDMENTS

Claim Amendment Summary

Claims pending

- Before this Amendment: Claims 1-17.

- After this Amendment: Claims 1-18

Non-Elected, Canceled, or Withdrawn claims: None

Amended claims: 1,4,9,13 and 17

New claims: 18

Claims:

1.   **(Currently Amended)** A processor-readable medium having processor-executable instructions that, when executed by a processor, performs acts comprising:

obtaining a digital good;

partitioning the digital good into a plurality of regions;

calculating rational statistics of one or more the regions of the plurality, so that the statistics of a region are representative of the region, wherein the calculating comprises generating the rational statistics of one or more regions of the plurality via a hashing function having quotient of two weighted, linear, statistical combinations and wherein the rational statistics are semi-global characteristics;

quantizing the <u>rational</u> statistics;

marking the digital good with the quantized <u>rational</u> statistics of the plurality of the regions.

2. **(Original)** A medium as recited in claim 1, wherein the calculating comprises generating the rational statistics of one or more regions of the plurality via a hashing function.

3. **(Original)** A medium as recited in claim 1, wherein the calculating comprises generating the rational statistics of one or more regions of the plurality via a hashing function employing a quotient of at least two weighted linear combinations of statistics of the one or more regions of the plurality.

4. **(Currently Amended)** A medium as recited in claim 1, wherein ~~the calculating comprises generating the rational statistics of one or more regions of the plurality via a hashing function, h, where~~ <u>h of the hashing function</u> <u>is</u>

$$h_i = \frac{\sum\limits_{j \in R_i} \alpha_{ij} s_j}{\sum\limits_{j \in R_i} b_{ij} s_j}$$

where:

- a_{ij} is the jth element of a_i and a_i are a pseudo-random generated weight factors;

- b_{ij} is the jth element of b_i and b_i are a pseudo-random generated weight factors;

- s denotes the digital good of dimension $N \times 1$;

- R_i are the plurality of regions, where $R_i \subseteq \{1,2,...,N\}$.

5. **(Original)** A medium as recited in claim 1, wherein the partitioning comprises segmenting the digital good into a plurality of overlapped regions.

6. **(Original)** A medium as recited in claim 1, wherein the marking comprises embedding a watermark via quantization.

7. **(Cancelled)**

8. **(Original)** A computer comprising one or more processor-readable media as recited in claim 1.

9. **(Currently Amended)** A processor-readable medium having processor-executable instructions that, when executed by a processor, performs acts comprising

obtaining a digital good; and

using quantization, ~~water~~marking the digital good with a watermark, wherein such quantization is based upon semi-global characteristics of regions of the digital good, wherein such semi-global characteristics are generated via a hashing function employing a quotient of at least two weighted linear combinations of statistics of the regions of the digital good.

10. **(Cancelled)**

11. **(Cancelled)**

12. **(Original)** A computer comprising one or more processor-readable media as recited in claim 9.

13. **(Currently Amended)** A system for facilitating the protection of digital goods, the system comprising:

a partitioner configured to segment a digital good into a plurality of regions;

a region-statistics calculator configured to calculate rational statistics of one or more of the plurality of regions, wherein the statistics of a region are representative of that region, wherein the region-statistics calculator is further configured to generate the rational statistics of one or more regions of the plurality via a hashing function having quotient of two weighted, linear, statistical combinations and wherein the rational statistics are semi-global characteristics;

a region quantizer configured to quantize ~~such~~ the rational statistics of a region;

a digital-goods marker configured to generate a marked good using the quantized rational statistics.

14. **(Original)** A system as recited in claim 13, wherein the region-statistics calculator is further configured to generate the rational statistics of one or more regions of the plurality via a hashing function.

15. (Original) A system as recited in claim 13, wherein the region-statistics calculator is further configured to generate the rational statistics of one or more regions of the plurality via a hashing function, employing a quotient of at least two weighted linear combinations of statistics of the one or more regions of the plurality.

16. (Original) A system as recited in claim 13, wherein the partitioner is further configured to segment a digital good into a plurality of overlapping regions.

17. (Currently Amended) A system as recited in claim 13, wherein the region-statistics calculator is further configured to generate the rational statistics of one or more regions of the plurality via a hashing function, h, where h of the hashing function is

$$h_i = \frac{\sum_{j \in R_i} \alpha_{ij} s_j}{\sum_{j \in R_i} b_{ij} s_j}$$

where:

- a_{ij} is the jth element of a_i and a_i are a pseudorandom generated weight factors;

-     b_{ij} is the jth element of b_i and b_i are a pseudorandom generated weight factors;

-     s denotes the digital good of dimension N × 1;

-     R_i are the plurality of regions, where $R_i \subseteq \{1,2,...,N\}$.

**** NEW ****

18. (New) A processor-readable medium having processor-executable instructions that, when executed by a processor, performs acts comprising:

obtaining a digital good;

partitioning the digital good into a plurality of regions, wherein the partitioning comprises segmenting the digital good into a plurality of overlapped regions;

calculating rational statistics of one or more the regions of the plurality, so that the statistics of a region are representative of the region, wherein the rational statistics are semi-global characteristics;

quantizing the rational statistics;

marking the digital good with the quantized rational statistics of the plurality of the regions, wherein the marking comprises embedding a watermark via quantization,

wherein the calculating comprises generating the rational statistics of one or more regions of the plurality via a hashing function, h, that hashing function having quotient of two weighted, linear, statistical combinations, and where

$$h_i = \frac{\sum\limits_{j \in R_i} a_{ij} s_j}{\sum\limits_{j \in R_i} b_{ij} s_j}$$

where:

- a_{ij} is the jth element of a_i and a_i are a pseudo-random generated weight factors;

- b_{ij} is the jth element of b_i and b_i are a pseudo-random generated weight factors;

- s denotes the digital good of dimension N × 1;

R_i are the plurality of regions, where $R_i \subseteq \{1,2,...,N\}$.